



U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

REPLY TO
ATTN OF WD-134

FEB 2 1983

Gerry Fritz
Plant Manager
MAPCO Petroleum, Inc.
1100 H & H Lane
North Pole, Alaska 99705

Dear Mr. Fritz:

The city of North Pole has agreed to accept, on a continuing basis, approximately 52,000 gpd initial flow, 72,000 gpd design flow, of Mapco Petroleum's pretreated wastewater at its municipal sewage lagoons. The treated effluent consists mainly of desalter waste from topping operations.

This letter sets forth the limitations, monitoring, reporting and other requirements of the general pretreatment regulations, 40 CFR Part 403, and the petroleum refining categorical regulations, 40 CFR Part 419. General authority for imposing monitoring and reporting requirements are contained in Section 308 of the Clean Water Act. Enclosure #1, General Pretreatment Provisions, provides further direction and clarification regarding applicable statutory and regulatory requirements.

Categorical Limits

In accordance with 40 CFR 419.17, limits for Mapco's pretreated waste discharge to the North Pole lagoons are indicated below:

<u>Parameter</u>	<u>Units</u>	<u>Daily Max. Concen.</u>
Oil & Grease	mg/l	100
Ammonia (as N)	mg/l	100

Prohibited Limits

In accordance with 40 CFR 403.5, general prohibited discharge and specific discharge limitations also apply to Mapco's effluent. The local limits needed to protect North Pole's treatment facility (as established in the earlier temporary batch discharges), are shown below:

<u>Parameter</u>	<u>Units</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>
Flow	gpd	80,600	72,000
*Total Suspended Solids (TSS)	mg/l	N/A	200
Biochemical Oxygen Demand (BOD ₅)	mg/l	N/A	200
Chemical Oxygen Demand (COD)	mg/l	N/A	1,000
**BTX	ug/l	100	N/A
Conductivity	umhos/cm	10,000	N/A
pH	ph units	Always between 7.0 and 9.0	
***Heat	---	---	---

*Mapco shall ensure that material from the existing inorganic sludge layer at the bottom of lagoon cell B is not discharged to the city's system. The cell B withdrawal structure (approximately 2 feet above the existing sludge layer) will be utilized at all times to ensure that existing cell B process sludge is not disturbed.

**Concentrations of BTX (the sum of benzene, ethylbenzene, toluene, and xylene), or other pollutants in the discharge that may present a potential explosive or fume toxicity threat, appear to be below critical levels. However, Mapco must ensure that concentrations of these pollutants do not create a fire or explosive hazard (in accordance with 40 CFR 403.5(b)(1)) or create a fume toxicity problem in North Pole's system.

***Mapco must provide a sufficient amount of heat in its effluent to prevent additional freezing problems from occurring at North Pole's municipal sewage treatment facility.

These local limits have been developed from data gathered during Mapco's temporary batch discharge to North Pole's plant this past summer. They represent levels of pollutants at which no toxic effect or inhibition of processes could be observed in the city's lagoons.

Self-Monitoring Requirements

Mapco shall monitor its discharge for the following pollutants according to the following protocol:

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>	<u>Type</u>
Flow	gpd	Continuous	Recording
Oil & Grease	mg/l	1/week	Grab
Ammonia (as N)	mg/l	1/week	24-hour composite***
TSS	mg/l	1/week	24-hour composite***
BOD ₅	mg/l	2/month	24-hour composite***
COD	mg/l	2/month	24-hour composite***
**BTX	ug/l	2/month	Grab
Conductivity	umhos/cm	Continuous	Recording
pH	pH units	Continuous	Recording
*Priority Pollutant Scan	ug/l	1/quarter	24-hour composite***

*Mapco shall sample and report for all the specific toxic pollutants listed in Table II of Appendix D of 40 CFR Part 122 (priority pollutant scan) according to the protocol shown above. The scan does not have to include the pesticide portion of the list. If the initial priority pollutant scans show pollutant levels to be insignificant, Mapco may request EPA, Alaska Department of Environmental Conservation (ADEC) and the city of North Pole to concur on reducing the frequency of this test.

**Benzene, ethylbenzene, each xylene isomer and toluene, shall be separately quantified and the total reported. EPA method 602, Purgeable Aromatics, shall be used as outlined in 40 CFR Part 136. The sample shall be acidified in accordance with paragraph 9.2 of that method.

***A 24-hour composite is defined as a flow-proportioned mixture of not less than 8 discrete aliquots over the operating day. Each aliquot shall be a grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of standard methods for the examination of water and wastewater.

Additional Interim Self-Monitoring

For the time period extending from Mapco's initial discharge from pretreatment lagoon B, until lagoon B is taken out of service to undergo modifications, the following metals shall be sampled in the discharge: arsenic, cadmium, copper, lead, mercury, nickel, silver, selenium and zinc.

The metals shall be expressed as "total" and shall be sampled twice per month from 24-hour, flow proportionate, composites taken at the same time as the TSS sample above.

If the tests show that metal levels are insignificant, Mapco may request EPA, ADEC and North Pole to concur in reducing the frequency or discontinuing the tests. However, if results show high metal levels, monitoring may be continued and/or additional limits imposed.

Mapco shall give advance notice to EPA, ADEC and North Pole of the anticipated date of cell B shut down. At that time, Mapco will submit (to EPA, ADEC and North Pole) a plan and schedule for cell B modifications. Depending on that plan, additional monitoring and/or limits may be imposed during those modifications.

After lagoon B is back on line, the requirement for continued metals testing will be evaluated and Mapco notified accordingly.

The sampling point for both interim and ongoing self-monitoring shall be immediately after Mapco's pretreatment facility before the treated effluent enters the North Pole system.

Dilution Flow

Mapco shall not increase the use of water in such a way as to dilute its discharge for the purpose of meeting specified pollutant limitations.

Final Compliance Report

Mapco shall notify EPA, ADEC and North Pole of the commencement of its discharge and submit a final compliance report in accordance with 40 CFR 403.12(d) within 30-days of that discharge.

The report must indicate the nature and concentration of all regulated pollutants in the facility's discharge, the average and maximum daily flows of the discharge, a statement of whether compliance is consistently being achieved, and if not, what additional measures are needed to achieve compliance.

Quarterly Compliance Report

In accordance with 40 CFR 403.12(e), Mapco shall submit to EPA, ADEC and North Pole, a quarterly continuing compliance report which summarizes all its self-monitoring data, including priority pollutant scans and interim self-monitoring for metals, (as specified above) for the preceding three month period. The report must include a certification that all tests were conducted in accordance with EPA approved procedures (as specified in 40 CFR Part 135).

The first quarterly report is due three months after the final compliance report is due, but in no case later than July 15, 1988. Each subsequent quarterly report is due October 15, January 15, April 15, etc.

In the event that Mapco conducts additional monitoring, all results shall be contained in the self-monitoring reports submitted to EPA.

Priority Pollutant Scan Review

EPA will review quarterly scans in conjunction with the city and ADEC for any high values. It is expected that results will be similar to batch discharge scan results found earlier this summer. However, high scan values that could result in interference with North Pole's lagoons or cause water quality problems may necessitate curtailment of Mapco's discharge or other appropriate action.

Review of Metals Monitoring Data

EPA will review metal test results with the city and ADEC for levels that could interfere with the quality of North Pole's lagoon sludge. A recent analysis indicates that if concentrations of metals remain similar to those shown in earlier batch discharge tests, the quality of the city's lagoon sludge will remain good. (A copy of this analysis will be sent to Mapco separately.)

The city of North Pole will be required to perform annual priority pollutant scan and metal testing of its lagoon sludge. The level of pollutants found in these tests could change Mapco's pretreatment limits and/or cause curtailment of its discharge.

Notice of Slug Loads and Significant Violations of Limitations

Mapco shall immediately notify (within 24-hours or less if possible) the city of North Pole and its treatment plant operator, in the case of any slug loads or violations of pretreatment limits noted during self-monitoring activities (in accordance with 40 CFR 403.12). This includes spills of materials that may enter refinery sumps or otherwise find their way to the pretreatment facility and the city's sewer. EPA and ADEC shall also be so notified within one business day. The company shall follow up with formal written notification discussing circumstances and remedies within 5 days of the occurrence. Additional sampling shall be conducted within 24 hours to assess compliance with the specific pollutant limitation and results reported.

In no case shall Mapco wait until its next quarterly report to notify the city, EPA or ADEC of slug loads or significant violations.

Accidental Spill Prevention Plan (ASPP)

Mapco shall submit to EPA an ASPP to minimize and prevent spills and slug discharges of pollutants from its operation. The ASPP shall cover chemicals and products stored on site that might find their way to the pretreatment facilities and the city's system through sumps, piping, floor drains, etc. Guidance and an example of an acceptable ASPP are enclosed.

The ASPP is to be submitted to EPA, ADEC and North Pole by August 1, 1988.

Planned Changes

The above limitations and monitoring requirements are based on current operational practices at the refinery. Mapco shall notify EPA as soon as possible of any planned changes to its operations that would affect its discharge.

Inspection and Entry

Mapco shall allow the authorized representatives of North Pole, EPA or ADEC, upon presentation of their credentials, to:

1. Enter and inspect, at reasonable times, the facilities, equipment, practices or monitoring records required under the pretreatment regulations.
2. Sample or monitor, at reasonable times, for the purpose of assuring pretreatment regulation compliance, any substances or parameters at Mapco's pretreatment facilities.

Submittal Addresses

All reports, notifications and other submittals prepared pursuant to this letter must be signed by a principal executive of Mapco or an authorized representative. Copies of these documents should be sent to the following addresses (appropriate phone numbers are also shown):

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101
Attn: Water Compliance Section, WD-135
(206) 442-1213

State of Alaska
Northern Regional Office
Department of Environmental Conservation
P.O. Box 1601
Fairbanks, Alaska 99701
(907) 452-4714

City of North Pole
P.O. Box 55109
North Pole, Alaska 99705
(907) 488-2281

Mapco must ensure that its discharge does not cause any noticeable toxic effect, adverse worker health and safety conditions, interference or inhibition to the city's treatment system, significant degradation of the city's lagoon sludge which prohibits its intended use, or a violation of water quality or the city's NPDES permit. The city will be required to perform special internal monitoring (including lagoon micro exams) in order to determine if any of these adverse effects are occurring. Periodic consultation with the city of North Pole will be necessary. If any of these effects are observed, Mapco shall reduce or halt its discharge accordingly.


Nothing in this letter shall relieve Mapco from complying with the requirements of North Pole's sewer use ordinance and/or its contract with North Pole for sewer services.

The above limits or other requirements may be modified in the future if new data indicates that changes are appropriate.

Non-compliance with any of the above-cited regulatory requirements could subject Mapco to the enforcement provisions of Section 309 of the Clean Water Act.

Questions may be directed to Mike Silverman at (206) 442-1447.

Sincerely,


Robert S. Burd
Director, Water Division

Enclosures

cc: Doug Dasher, ADEC
Al Ewing, AOO
Greg Jones, Roen Design
Tom Laronge, TML, Inc.
Mike Pollen, NTL
City of North Pole

General Pretreatment Provisions

1. All pretreatment systems and monitoring devices shall be properly operated and maintained.
2. The diversion or bypass of any discharge from any pretreatment facility to maintain compliance with pretreatment requirements is prohibited except where unavoidable to prevent loss of life or severe property damage. Any occurrence shall be reported immediately to EPA.
3. All sampling/operational records shall be maintained for no less than three years.
4. For each measurement or sample taken, the following information shall be recorded:
 - a. The exact place, date, and time of sampling;
 - b. The person or persons who performed the analyses;
 - c. The person or persons who performed the analyses;
 - d. The analytical techniques or methods used; and
 - e. The results of all required analyses.
5. Disposal of spent chemicals or sludges shall conform with Subtitles C and D of the Resource Conservation and Recovery Act.
6. All reports shall be signed by a principal executive officer or his designee (40 CFR 403.12(i)).

Any person who knowingly makes a false statement on any report or other required document, knowingly renders any monitoring device or method inaccurate, or otherwise violates any applicable clean water requirements and pretreatment regulatory requirements shall be liable to enforcement action as prescribed in Section 309 of the Water Quality Act of 1987.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

OCT 06 1998

Reply To
Attn Of: OW-130

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

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To	Kathleen McCullom	From	Sharon Wild
Dept./Agency	MAPCO	Phone #	206-553-032
Fax #	207-488-5185	Fax #	206-553-016
NSN 7540-01-317-7368		5099-101 GENERAL SERVICES ADMINIST	

David C. Rowse, Vice President
Mapco Alaska Petroleum Inc.
1100 H & H Lane
North Pole, Alaska 99705

RE: Application for Revised Discharge Permit

Dear Mr. Rowse:

An application for a revised discharge permit for the MAPCO Alaska Petroleum's North Pole Refinery was received by EPA on May 26, 1998. We have reviewed the application, but are still sorting out some administrative issues. We have consulted with Tim Wingerter, Alaska Department of Environmental Conservation, and with Jim Remitz, City of North Pole, during the course of this review. They did not object to the modified permit conditions which were proposed.

We understand that MAPCO expects to increase its production with the addition of another crude unit by mid-October. Because of the time constraint, we are choosing at this time to modify the permit conditions to allow the modifications listed below. The previous permit conditions were imposed on February 2, 1988, and modified on March 14, 1990.

Flow Limit: Daily maximum: 100,800 gpd 70gpm
Monthly average 93,600 gpd 65gpm

Pollutant Limits: Arsenic: 0.1 mg/l
Selenium: 0.1 mg/l
Conductivity: 15,000 μ mhos/cm
Sulfolane: 100 mg/l

Monitoring: Arsenic and selenium shall be monitored monthly.

pH and conductivity shall be monitored weekdays by grab sample.

Sulfolane (thiocyclopentane-1,1-dioxide) shall be monitored weekly, unless the City of North Pole requires more frequent sampling.

Test Methods:

Analyze oil & grease samples using EPA Method 1664

Analyze BTEX samples using EPA Method 602 except when performing quarterly testing for priority pollutants when EPA Method 624 will be used

Since EPA does not have a required analytical method for sulfolane, a description of the analytical method used shall be included in each quarterly report.

Notification:

Addition of hydrogen peroxide and high phosphate fertilizer to the pretreatment system shall be recorded in operating logs and reported in the quarterly reports to EPA, ADEC, and the City of North Pole. (Advance notification to the agencies is not required.)

Submittal Addresses:

Reports, notifications, and other submittals must be signed by a principal executive of MAPCO Petroleum or an authorized representative. Copies of these documents should be sent to the following addresses:

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue, OW-130
Seattle, WA 98101
Attn: Pretreatment Coordinator

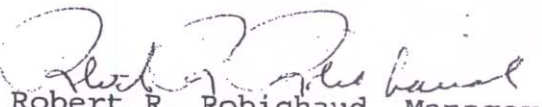
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Alaska Department of Environmental Conservation
Northern Regional Office
610 University Avenue
Fairbanks, AK 99709

City of North Pole
P.O. Box 55109
North Pole, AK 99705

Questions regarding these conditions should be directed to
Sharon Wilson at 206-553-0325 or WILSON.SHARON@EPAMAIL.EPA.GOV.

Sincerely,


Robert R. Robichaud, Manager
NPDES Permit Unit

cc: Jim Remitz, City of North Pole
Tim Wingerter, ADEC-NRO
Kathleen McCullom, MAPCO

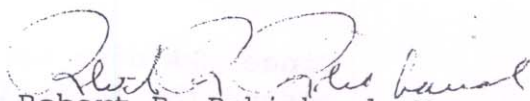
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Northern Regional Office
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P.O. Box 55109
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Sharon Wilson at 206-553-0325 or WILSON.SHARON@EPAMAIL.EPA.GOV.

Sincerely,


Robert R. Robichaud, Manager
NPDES Permit Unit

cc: Jim Remitz, City of North Pole
Tim Wingerter, ADEC-NRO
Kathleen McCullom, MAPCO